REMARKS

Claims 1-20 are now pending in the current application. In an Office Action dated September 24, 2003, the Examiner finally rejected claim 1 under 35 U.S.C. §102(b) as being anticipated by Joline, et al., U.S. Patent No. 6,005,696 ("Joline"). In addition, the Examiner objected to claims 2-9 as being dependent upon a rejected base claim, but indicated that claims 2-9 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Finally, the Examiner indicated allowance of claims 10-20. Applicants' representative again respectfully traverses the rejection of claim 1, for reasons detailed below. Applicants' representative wishes to defer rewriting claims 2-9 in independent form until Applicants' representative's currently submitted arguments are considered by the Examiner. Again, Applicants' representative wishes to thank the Examiner, on behalf of the Applicants, for the Examiner's contingent allowance of claims 2-9 and allowance of claims 10-20. Applicants' representative does not intend for the following arguments to appear strident or critical of the Examiner. They may appear so only because Applicants' representative feels that the cited reference, Joline, is completely unrelated to the subject matter of the current application, and simply cannot understand how Joline can possibly be uses as the basis for an anticipation rejection.

Claim 1 from the current application is provided, below, for convenient reference, with emphasis added:

> 1. A method for testing a *multi-device enclosure* that contains multiple devices, the method comprising:
> controlling a number of bypass circuits to bypass a number of external communications medium connectors to *isolate* the multi-device enclosure from an external communications medium;
> *testing the multi-device enclosure*; and
> when the multi-device enclosure passes the testing,
> controlling a number of bypass circuits to connect the number of external communications medium connectors to the external communications medium.

Note that the claimed method concerns testing a multi-device enclosure by controlling bypass circuits to isolate the multi-device enclosure from an external communications

medium while the multi-device enclosure is tested. The meaning of the word "isolate" is to disconnect the multi-device enclosure from the external communications medium, so that the multi-device enclosure does not receive messages from, and cannot transmit messages to, remote entities through the communication medium. This is also described in the Summary of the Invention section of the current application, as follows:

> The present invention provides a method by which a *multi-peripheral-device enclosure can, upon being powered up, isolate itself from external host computers and from other, external multi-peripheral-device enclosures in order to test the multi-peripheral-device enclosure's internal communications medium and to test each peripheral device within the multi-peripheral-device enclosure.* Any peripheral devices found to be defective are bypassed via port bypass circuit controllers and port bypass circuits. *If the internal communications medium is found to be defective, the method of the present invention can elect to prevent the multi-peripheral-device enclosure from configuring itself into the communications medium that interconnects the multi-peripheral-device enclosure with external host computers and other, external multi-peripheral-device enclosures.* (page 3, lines 12 – 23) (emphasis added)

Furthermore, the current application repeatedly characterizes multi-device enclosure as being an enclosure containing peripheral devices interconnected with one or more host computers, as for example:

> Because of the high bandwidth and flexible connectivity provided by the FC, the FC is becoming a common medium for interconnecting peripheral devices within *multi-peripheral-device enclosures, such as redundant arrays of inexpensive disks ("RAIDs"), and for connecting multi-peripheral-device enclosures with one or more host computers.* These multi-peripheral-device enclosures economically provide greatly increased storage capacities and built-in redundancy that facilitates mirroring and fail over strategies needed in high-availability systems. (page 1, line 25 – page 2, line 3) (emphasis added)

Finally, a similar discussion begins the detailed description of the present invention:

> The present invention relates to the detection and isolation of malfunctioning disk drives within HAEs as well as the detection and isolation of malfunctioning HAEs within a daisy-chain of HAEs connected via FC arbitrated loops to a host computer. *The basic strategy represented by the present invention is for each HAE, upon power up, to conduct a self-test prior to joining the FC arbitrated loops that interconnect a series of HAEs with a host computer. In this fashion, each HAE guarantees a certain level of functionality and reliability prior to joining the FC arbitrated loops.*

The Examiner has cited Joline in an anticipation rejection of Applicants' claimed invention. Joline discloses a testing method for testing line and/or trunk circuits in a telephone system distributed over remote offices and a centralized test center. In Joline's method, the line and/or trunk circuits are coupled to a maintenance port of a particular office, and then backhauled from the maintenance port to the remote test center via a shared network. As discussed in detail in Joline, in order to backhaul the line and/or trunk circuits, the test center arranges for the remote office to transmit and receive messages through alternate circuits within the normal SONET ring connection by allocating alternative bandwidth in the SONET ring (column 9, paragraph beginning on line 38). In essence, as stated in the sentence beginning on line 24 of column 7, Joline's invention arranges to "serially impose a test device into the circuit under test in a manner similar to that discussed above relative to Figure 1." This is clearly illustrated in Figure 3 of Joline, where the test control center 304 is remote to the office 306 for which line and/or trunk circuits, implemented in the SONET ring 301, are to be tested. The add/drop multiplexer 302 is manipulated by the test control center to allocate SONET ring bandwidth to bring a T1 signal from the office under test to the remote test control center 304. This method fits the stated purposes of Joline's invention, beginning on line 16 of column 3:

> It is a further object of the invention to provide a testing system and method having a group of analyzers and/or other test devices at one central location and backhauling of bandwidth from the office equipment providing the actual communications services to the central location.
> It is also an object of the present invention to utilize selective coupling of line/trunk circuits to a maintenance port of a switch and backhauling bandwidth from the maintenance port to a test center via a shared use network serving a plurality of office rather than by dedicated links or trunks.

In Applicants' representative's opinion, Joline is not a suitable reference for a 35 U.S.C. §102(b). Joline is wholly and completely unrelated to Applicants' claimed invention. Fist, while Applicants explicitly claim, in claim 1, isolation of a multi-device enclosure from an external communications medium, Joline arranges to connect a link and/or trunk line through alternative bandwidth in an optical fibre ring to a remote test center. Applicants' method is directed to isolating a multi-device enclosure from an external communications medium in order to allow the multi-device enclosure to

test itself, or, in other words, to perform a self test, as clearly laid out in the above quoted sections of the current application. That is why the multi-device enclosure is isolated from the external communications medium. Joline, by contrast, connects the centralized test center to the remote office whose links and/or trunks are to be tested, in order to remotely conduct tests from the centralized test center. Applicants clearly claim "testing the multi-device enclosure," while Joline repeatedly and explicitly states that Joline's object is to test line and/or trunk circuits interconnecting a remote telephone office with other telephone offices. Joline does not test a multi-device enclosure. Joline tests fibre-optic-implemented circuits. In the disclosed embodiment, Applicants' method is directed to testing a multi-device enclosure interconnected with a host computer via an external communications medium that contains storage devices, as made abundantly clear in the current application.
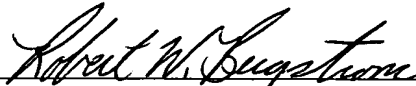
The Examiner states, in section 9 of the Office Action, that Joline discloses a method for testing a switching device 306. This is simply not correct. Joline explicitly states, on lines 53-56 of column 7, that "[o]ne or more of the digital cross-connect systems 306 receives T3 circuits and couples both ends of a T1 line to be tested to the FAD group maintenance port 303." The Examiner states that the test control center isolates the switching device 306 from the external communications medium. This also is not correct. Joline states, beginning on line 66 of column 7, that "the connections in the DCS 306 are mapped by control signals received from the central test control 304. Once mapped to the maintenance port 303, a sequence of mapping events takes place simultaneously in each one of the add/drop multiplexers 302 to allocate the bandwidth necessary to bring the T1 signal back over the SONET ring 301." The test control center uses the DCS 306 to access a T1 link in order to test the T1 link.

In Applicants' representative's opinion, the Examiner has misread Joline, and offered correspondences between entities in a telephone switching system to elements of Applicants' claims that are completely unrelated, and have absolutely no correspondence with one another. Applicants' claimed invention is directed to isolating a multi-device enclosure, such as a disk array, from a communications medium in order to test the multi-device enclosure by a self-test module within the multi-device enclosure. Joline links a centralized test center through a fibre-optic ring to a line or trunk within a

telephone switching network in order to remotely test the line or link from the centralized test center. Joline is simply unrelated, and would be as inappropriate for a 35 U.S.C. §103(a) obviousness-type rejection as it is for a 35 U.S.C. §102(b) anticipation rejection. No correspondence between even one claim element of claim 1 can be found with an element in Joline. This is not surprising, since Applicants' claimed invention is directed to multi-device enclosure interconnected through a communications medium to one or more host computers, while Joline is directed to testing fibre-optic lines and/or trunks in a telephone switching network.

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited. The application is now clearly in order for allowance.

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